Operations Dashboard: Designing Effective Dashboard

David Nyenhuis, Tif Pun
Agenda

- Qualities of a “good” dashboard
- Map and data preparation
- Dashboard layout
- Dashboard elements
- Effective use of colors
- Embedded dashboards
- Interactive dashboards
- Mobile dashboards
Introduction
Operations Dashboard for ArcGIS

• A web app focused on authoring and viewing dashboards
• Provides data summaries on a single web page
• Common patterns of use:
  - Monitor and manage operations
  - Event Management
  - Visualize key performance
• Available in ArcGIS Online & ArcGIS Enterprise 10.6 (and beyond)
Qualities of “Good” Dashboards

• Know your audience:
  - What questions are they trying to answer
  - In what environments are they going to view the dashboard
• Express information clearly and accurately, without distraction
• Grab attention to where it is needed
Demos
Map and Data Preparation
Maps and Data Considerations

- Exclude irrelevant data
- Style your layers (operational and basemap) to convey meaning
- Set appropriate refresh interval
Dashboard Layout
Dashboard Layout Considerations

• Tailor a dashboard to the audience’s requirements
• Keep it simple
• Arrange elements appropriately
• Provide contextual information e.g. set reference in indicators
• Use color to grab attention
Dashboard Elements
Tips for Designing Visual Elements

- Design for your audience
- Design for your display environment
- They should have a purpose
- Keep them simple
- Make sure they are legible
Colors & Themes
Colors can be used for different purposes

• Connect related data together across different elements of the dashboard
• Ease eye strain and reduce harshness in dim lighting environments
• For branding purposes to create a feeling of authenticity
• Evoke emotion (discomfort or relief)
• Create a captivating aesthetic
Tips for Sharing and Embedding Dashboards

- Always use “HTTPS”
- Change https://myorg.maps.arcgis.com to https://www.arcgis.com
- Enable subscriber content for some layers
- Can prevent others from copying your dashboard on item details page
Interactive Dashboards
Interactive Dashboards Tips

• An interactive dashboard involves:
  1. Events: map extent change or selection change (triggered by user)
  2. Actions: spatial/attribute-based filtering or map actions
  3. Defined at source elements, applied to target elements

• Configure and apply multiple filters to drill down on data
• Set up attribute-based filters to show related records
Mobile Dashboards
Mobile Dashboards Considerations

- Less is more
- Mobile dashboards are complement, not replacement, of desktop dashboards
- Mostly used to show performance
- Reduce amount of text
- Use colors effectively
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Resources

- Product Documentation: https://arcg.is/2IVIC0R
- GeoNet: https://arcg.is/2zamYzd
- ArcGIS Solutions: https://arcg.is/2lYHzNP
- Training webinar: https://arcg.is/2np1xCI
- Bonus tip:
  - Want to see how a cool sample dashboard was configured?
  - Change: https://www.arcgis.com/apps/opsdashboard/index.html#/itemId
  - To: https://www.arcgis.com/apps/opsdashboard/index.html#/new?id=itemId
  - This will save a copy of the dashboard into your content
Bonus
Maps and data tips & tricks

- ObjectId field is required if the layer is used as a data source in dashboard